High sensitivity dynamic Headspace Sampling: from water to food packaging Material Analysis

The analysis of volatile compounds is a strictly important issue for a wide range of laboratories, involving food, flavour and fragrance, and environmental applications, among others. As is well-known, gas chromatography (GC) is the most valuable tool for volatile analysis, and when used in combination with automated headspace systems may yield more sensitive and reproducible results.
The present contribution demonstrates by means of several examples, e.g. water and food packaging material analysis, that the new Dynamic Headspace system provides the sensitivity needed to exceed low-level threshold values required by several regulations.
The Dynamic Headspace Sampler is a versatile system, which may be used either in dynamic headspace (DH) or purge and trap (P&T) mode. The system is easy to use and when combined to the automatic sampler delivers complete automation of all operation steps, including the addition of until six standards and/or surrogates. Solutions with different concentrations can also be prepared in a totally automatic manner. Moreover, there is no additional workload of cleaning glassware or line purging, and the sampling needle undergoes an automated cleaning cycle during the baking phase avoiding carry-over effects.

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